We have been asked to discuss in detail specific projects which we would undertake -- along with our relative priorities and the funding required for each -- if in FY-71 a 25% higher funding level became available. This amounts to [redacted] additional funding. Here once again, it is easier to deal in technical areas or categories rather than projects, giving specific projects where they are known or can be anticipated. In the area of imagery interpretation equipment and techniques, one area requiring further research and development during this time frame is improving display devices of the rear projection variety, i.e., broad area displays which more than one person can view at the same time. Breakthroughs are required in the development of those display techniques and equipment which permit both high resolution and excellent contrast rendition at the same time, e.g., a high fidelity system. Toward this end, image intensifier type screen systems would be studied and some promising digital image display techniques and approaches would be breadboarded. Each of these projects would absorb approximately [redacted] for a total of [redacted]

A greater portion of the total cost of the PI Correlated Stereogram Maker would be funded in FY 71 for a total investment in FY-71 of [redacted] This is an increase of [redacted] could be used in increasing efforts toward Product Improvement and Updating. The majority of this investment would be utilized to apply the wide-field high-power anamorphic stereoviewer optical head to other pieces of Center equipment, such as the Twin Stage Chip Comparators. We would anticipate expending [redacted] towards the development of a Reversal Polarity Viewer. This is an optical rather than an electronic system by which a negative can be viewed as a positive and a

positive as a negative.

Research would be conducted into the automation of comparators, i.e., combining the best features of current comparators and microdensitometers into one piece of automated equipment, at a cost of [redacted] An additional [redacted] would be utilized in a parallel effort directed towards the solution of the automatic change detection problem, thereby increasing the probability of technical success at an earlier date. 25X1 25X1

In the area of image analysis, [redacted] would be utilized to expand our work in the Analog (optical) Image Restoration and Manipulation area. The Photo Image Manipulation Viewer, currently funded for [redacted] in FY 71, would go through feasibility study, engineering design, and fabrication in FY 71, instead of being split-funded and phased over FY 71 and FY 72. This would utilize an additional [redacted] for a total FY 71 funding of [redacted] 25X1 25X1 25X1

Finally, an additional [redacted] could be used in the area of Imagery Interpretation Research to develop superior equipment training packages to insure that our highly sophisticated new systems will be used at maximum efficiency. 25X1

These are the basic areas in which the additional funding could be utilized. It is extremely difficult, if not impossible, to assign priorities at this time since priorities are basically established in relationship to operational requirements or based upon the relationship of a technological base to some oncoming piece of equipment. In the latter situation, we would require a much more detailed knowledge of specific projects in the FY-72-75 time frame while in the former case we would require a better knowledge of future requirements than is now available. The project/areas discussed have been listed in tabular form to facilitate rapid reference.

SPECIFIC ADDITIONAL PROJECTS IF FY-71 FUNDING INCREASED 25%

25X1

Project/Program	
Image Intensifier Screen System	
Image Display Techniques	
Automatic Change Detection (Parallel Effort)	
Automated Comparator	
Analog Image Restoration and Manipulation	
Image Manipulation Viewer (Increased Funding)	
PI Correlated Stereogram Maker (Increased Funding)	
Product Improvement (Increased Funding)	
Reversal Polarity Viewer	
Imagery Interpretation Research (Increased Funding)	
TOTAL	